WE CLAIM:

1. A method for identifying an agent that modulates an NF-AT bioactivity, the method comprising:

(a) assaying a biological activity of an NF-AT-modulatory polypeptide encoded by a polynucleotide selected from the members listed in Table 1, or a fragment of said polypeptide, in the presence of a test agent to identify one or more modulating agents that modulate the biological activity of the polypeptide; and

(b) testing one or more of the modulating agents for ability to modulate an NF-AT bioactivity.

2. The method of claim 1, wherein (b) comprises testing the modulating agents for ability to modulate NF-AT in regulating expression of an NF-AT responsive gene.

3. The method of claim 1, wherein (b) comprises testing the modulating agents for ability to modulate cellular level of NF-AT.

4. The method of claim 1, wherein the NF-AT-modulatory polypeptide is a kinase and the biological activity is phosphorylation of a second polypeptide.

5. The method of claim 4, wherein the second polypeptide is NF-AT or a fragment of NF-AT.

6. The method of claim 1, wherein the NF-AT-modulatory polypeptide is a protease and the biological activity is proteolysis of a second polypeptide.

7. The method of claim 6, wherein the second polypeptide is NF-AT or a fragment of NF-AT.

8. The method of claim 1, wherein the test agent modulates cellular level of the NF-AT-modulatory polypeptide.

**9.** The method of claim 1, wherein the assaying of the biological activity of the NF-AT-modulatory polypeptide occurs in a cell.

**10.** The method of claim 9, wherein the NF-AT-modulatory polypeptide is expressed from said polynucleotide that has been introduced into the cell.

**11.** The method of claim 1, wherein the NF-AT bioactivity is inducing expression of a second polynucleotide that is operably linked to an NF-AT response element.

**12.** The method of claim 11, wherein the second polynucleotide encodes a reporter polypeptide.

**13.** The method of claim 12, wherein the testing for ability to modulate an NF-AT bioactivity comprises:

providing a cell or cell lysate that comprises the second polynucleotide that is operably linked to the NF-AT response element;

contacting the cell or cell lysate with the test agent; and

detecting an increase or decrease in expression of the second polynucleotide in the presence of the test agent compared to expression of the second polynucleotide in the absence of the test agent.

**14.** The method of claim 1, wherein the testing for ability to modulate an NF-AT bioactivity comprises contacting a cell or cell lysate with the test agent and determining cellular level of NF-AT or a fragment of NF-AT.

**15.** The method of claim 1, wherein the testing for ability to modulate the NF-AT bioactivity comprises contacting a cell or cell lysate with the test agent and determining ability of NF-AT to bind to a second polynucleotide that comprises an NF-AT response element in the cell or cell lysate.

**16.** A method for identifying an agent that modulates cellular level of NF-AT, the method comprising:

(a) assaying a biological activity of an NF-AT-modulatory polypeptide encoded by a polynucleotide selected from the members listed in Table 1, or a fragment of said

polypeptide, in the presence of a test agent to identify a modulating agent that modulates the biological activity of the polypeptide; and

(b) testing the modulating agent for ability to modulate cellular level of NF-AT.

**17.** The method of claim 16, wherein the NF-AT-modulatory polypeptide is a transcription regulatory protein and the biological activity is transcription of a second polynucleotide.

**18.** The method of claim 17, wherein the second polynucleotide encodes an NF-AT or a fragment of the NF-AT.

**19.** The method of 16, wherein the testing comprises (i) contacting the modulating agent with a second polynucleotide operably linked to a transcription regulatory element of NF-AT; and (ii) detecting a change in cellular level of said second polynucleotide relative to cellular level of said second polynucleotide in the absence of the modulating agent.

**20.** The method of claim 19, wherein the contacting occurs in a cell.

**21.** The method of claim 19, wherein said second polynucleotide encodes a reporter polypeptide.

**22.** The method of claim 20, wherein said second polynucleotide encodes an NF-AT or a fragment of the NF-AT.

**23.** A method for identifying an agent that modulates expression of an NF-AT responsive gene, the method comprising:

(a) contacting a test agent with an NF-AT-modulatory polypeptide encoded by a polynucleotide selected from the members listed in Table 1;

(b) detecting a change in an activity of said NF-AT-modulatory polypeptide relative to the activity in the absence of the test agent; and

(c) detecting a change of expression level of the NF-AT responsive gene in the presence of the test agent identified in (b) relative to expression level of the NF-AT

responsive gene in the absence of the test agent; thereby identifying the test agent as a modulator of expression of the NF-AT responsive gene.

**24.** The method of claim 23, wherein (a) and (b) are performed in a cell.